

Chapter 2. Alternatives

2.1 Alternatives

The TRPA, CEQA, and NEPA require that consideration be given to a range of alternatives that could feasibly achieve the action's goals. The purpose of the alternatives analysis is to facilitate meaningful public participation through an informed decision-making process. A comparative analysis of the alternatives will aid in defining the issues and provide a clear basis for choice by the decision makers and the public. Final selection of a preferred alternative will not be made until after full evaluation of environmental effects, consideration of public comments, and approval of the final environmental document. There are currently three build alternatives and a no-build alternative under consideration. All build alternatives (Alternatives 2–4) are illustrated in Figure 2-1.

After comments are received from the public and reviewing agencies, Placer County, Caltrans, and FHWA may undertake additional environmental and/or engineering studies. A final EA/EIR/EIS will be circulated; the final EA/EIR/EIS will include responses to comments received on the DEA/DEIR/DEIS, and a preferred alternative will be determined once the public comments have been received. Following circulation of the final EA/EIR/EIS, if the decision is made to approve the proposed action, a Notice of Determination will be published for compliance with CEQA and a Record of Decision will be published for compliance with NEPA.

2.2 Project Goals

Project-related needs and purposes are identified in *Chapter 1* of this document. These needs and purposes are employed here as project goals that structure the alternatives definition and screening process. The identified needs and purposes are summarized below.

2.2.1 Identified Purposes

- Enhance pedestrian and bicycle mobility and safety through project design features.
- Improve water quality through the construction of new collection and conveyance infrastructure.
- Enhance the scenic and aesthetic character of the KBCC through project design features.
- Implement TRPA EIP and Community Involvement Plan (CIP) Projects.

2.2.2 Identified Needs

- Improve pedestrian and bicycle mobility and safety along the KBCC.
- Improve water quality and water conveyance infrastructure within the KBCC to meet appropriate standards.
- Improve aesthetic character of the KBCC to meet appropriate standards.
- Meet the community and regional planning objectives set for the KBCC.

2.3 Alternatives Evaluated

Placer County is proposing to improve the segment of SR 28 that runs through the unincorporated community of Kings Beach, located along the north shore of Lake Tahoe. This segment of SR 28 runs from the intersection of SR 28/SR 267 to the intersection of SR 28/Chipmunk Street. Three build alternatives are evaluated: Alternatives 2, 3, and 4. Table 2-1 presents a comparison between each of these alternatives, along with the no-build alternative. Each build alternative includes construction of sidewalks and bike lanes in both directions; improved pedestrian access and public parking areas; water quality improvements; and improvements to the SR 28 intersections with SR 267, and Bear, and Coon Streets.

Final selection of a preferred alternative will not be made until after the full evaluation of environmental effects.

Table 2-1. Relative Alternative Comparisons

Alternative 1	Alternative 2	Alternative 3	Alternative 4
No Project	3 Lane/Roundabouts/Seasonal No On-Street Parking	4 Lanes/Traffic Signals	3 Lanes/Roundabouts/No On-Street Parking
Pedestrian/Bicycle Mobility			
<u>Pros</u> 1. No temporary impacts related to project construction	<u>Pros</u> 1. Wider sidewalks (9.5 feet wide) encourage walking 2. Narrower street and median islands improve pedestrian crossings 3. Bike lanes encourage and make bicycle use safer 4. Roundabouts help serve as median islands to improve pedestrian crossings	<u>Pro</u> 1. Sidewalks (5 feet wide) would improve walking 2. Bicycle lanes encourage and make bicycle use safer 3. Signals would provide safe pedestrian crossings	<u>Pros</u> 1. Widest sidewalks (17 feet plus wide) encourage walking 2. Narrowest street and median islands improve pedestrian crossings 3. Bike lanes encourage and make bicycle use safer, particularly with no parking conflicts 4. Roundabouts help serve as median islands to improve pedestrian crossings
<u>Cons</u> 1. No sidewalks for pedestrians 2. No dedicated areas for bicycles	<u>Con</u> 1. Bicyclists may be unfamiliar with riding through roundabouts	<u>Con</u>	<u>Con</u> 1. Bicyclists may be unfamiliar with riding through roundabouts
Traffic Circulation			
<u>Pros</u> 1. No anticipated impact to traffic circulation	<u>Pros</u> 1. Roundabouts will allow continual flow of traffic (traffic need not stop at signals)	<u>Pros</u> 1. Left turn lanes on highway may slightly improve circulation 2. Signal lights will improve access from side streets	<u>Pros</u> 1. Roundabouts will allow continual flow of traffic (traffic need not stop at signals)
<u>Cons</u> 1. May be difficult to access highway from side streets at peak periods	<u>Cons</u> 1. Substantial traffic congestion during peak summer season and growing with time 2. Future traffic congestion would lead to cut through traffic through residential neighborhood		<u>Cons</u> 1. Substantial traffic congestion during peak summer season and growing with time 2. Future traffic congestion would lead to cut through traffic through residential neighborhood

Table 2-1. Continued

Alternative 1	Alternative 2	Alternative 3	Alternative 4
No Project	3 Lane/Roundabouts/Seasonal No On-Street Parking	4 Lanes/Traffic Signals	3 Lanes/Roundabouts/No On-Street Parking
Traffic Safety/Speeds			
<u>Pros</u>	<u>Pros</u> 1. Speeds likely reduced through two lane section.	<u>Pros</u> 1. Signals could better control traffic through the commercial area.	<u>Pros</u> 1. Speeds likely reduced through two lane section.
<u>Cons</u> 1. No change	<u>Cons</u> 1. Cut through traffic on neighborhood streets during peak periods could cause safety concerns. 2. Traffic congestion could lead to safety concerns.	<u>Cons</u> 1. Traffic speeds would remain essentially the same through town	<u>Cons</u> 1. Cut through traffic on neighborhood streets during peak periods could cause safety concerns. 2. Traffic congestion could lead to safety concerns.
Transit Operations			
<u>Pros</u> 1. No impacts	<u>Pros</u> 1. Improved walkability (ie wider sidewalks) and more structured parking nodes may encourage transit ridership 2. Better bus turnouts and shelters will enhance transit experience	<u>Pros</u> 1. Improved walkability (ie a sidewalk) and more structured parking nodes may encourage transit ridership 2. Better bus turnouts and shelters will enhance transit experience	<u>Pros</u> 1. Improved walkability (ie wider sidewalks) and more structured parking nodes may encourage transit ridership 2. Better bus turnouts and shelters will enhance transit experience
	<u>Cons</u> 1. Increased periods of traffic congestion will delay busses caught in traffic		<u>Cons</u> 1. Increased periods of traffic congestion will delay busses caught in traffic

Table 2-1. Continued

Alternative 1	Alternative 2	Alternative 3	Alternative 4
No Project	3 Lane/Roundabouts/Seasonal No On-Street Parking	4 Lanes/Traffic Signals	3 Lanes/Roundabouts/No On-Street Parking
Aesthetics			
	<u>Pros</u> 1. Wider sidewalk provides more room for aesthetic treatment and less pavement 2. More organized parking. 3. Roundabouts can be considered distinctive. 4. Narrower road provides greater pedestrian ambiance.	<u>Pros</u> 1. Some sidewalk differentiates traffic areas from pedestrian areas 2. More organized parking	<u>Pros</u> 1. Wider sidewalk provides more room for aesthetic treatment and less pavement 2. More organized parking. 3. Roundabouts can be considered distinctive. 4. Narrower road provides greater pedestrian ambiance. 5. No on street parking will open view corridors and provide less visual “clutter”
<u>Cons</u> 1. No improvement		<u>Cons</u> 1. Signal lights often considered unattractive 2. Dedicated left turn lanes require more pavement.	
Water Quality			
<u>Pros</u>	<u>Pros</u> 1. Substantial water quality improvements	<u>Pros</u> 1. Substantial water quality improvements	<u>Pros</u> 1. Substantial water quality improvements
<u>Cons</u> 1. No improvement			
Biology			
<u>Pros</u> No impacts	<u>Pros</u>	<u>Pros</u>	<u>Pros</u>
	<u>Cons</u> 1. Some trees removed for parking construction	<u>Cons</u> 1. Some trees removed for parking construction	<u>Cons</u> 1. Some trees removed for parking construction

Table 2-1. Continued

Alternative 1	Alternative 2	Alternative 3	Alternative 4
No Project	3 Lane/Roundabouts/Seasonal No On-Street Parking	4 Lanes/Traffic Signals	3 Lanes/Roundabouts/No On-Street Parking
Parking			
<u>Pros</u> 1. No change in number or type of parking	<u>Pros</u> 1. More parking provided for general public use. 2. Provide safer and more organized off-street parking	<u>Pros</u> 1. More parking provided for general public use. 2. Provide safer and more organized off-street parking	<u>Pros</u> 1. More parking provided for general public use. 2. Provide safer and more organized off-street parking
<u>Cons</u> 1. Inefficient and sometimes unsafe use of available parking areas	<u>Cons</u> 1. Some specific parking areas are relocated away from their current area. 2. On-street parking removed during the peak traffic/summer tourist season	<u>Cons</u> 1. Some specific parking areas are relocated away from their current area.	<u>Cons</u> 1. Some specific parking areas are relocated away from their current area. 2. No on-street parking
Right of Way Acquisition			
<u>Pros</u> 1. No acquisition required	<u>Pros</u> 1. No structures are directly affected. 2. Wider sidewalks provide more area to transition into private property.	<u>Pros</u> 1. Minor permanent right of way needed	<u>Pros</u> 1. No structures are directly affected. 2. Wider sidewalks provide more area to transition into private property.
	<u>Cons</u> 1. Acquisition required at roundabout locations	<u>Cons</u> 1. Substantial temporary construction easements needed to transition proposed improvements to private property	<u>Cons</u> 1. Acquisition required at roundabout locations

Table 2-1. Continued

Alternative 1	Alternative 2	Alternative 3	Alternative 4
No Project	3 Lane/Roundabouts/Seasonal No On-Street Parking	4 Lanes/Traffic Signals	3 Lanes/Roundabouts/No On-Street Parking
Constructability			
<u>Pros</u> 1. No construction	<u>Pros</u> 1. Narrowing road provides more room for construction. 2. Provides for quicker construction, reducing construction impacts on community	<u>Cons</u> 1. Pavement to within 5 feet of buildings in some areas will be difficult. 2. Narrower sidewalks provide less area to transition road (drainage facilities) to private property. 3. Maintaining 4 traffic lanes during construction will be expensive and take more time to construct	<u>Pros</u> 1. Narrowest road provides most room for construction. 2. Provides for quicker construction, reducing construction impacts on community
Cost (Construction): \$0–			

The following alternatives are evaluated.

2.3.1 Alternative 1 (No Build)

The existing roadway configuration would be unchanged. Because there are no improvements under this alternative, there would be no improvements to water quality, aesthetics, or other resource areas.

2.3.2 Alternative 2: Two Lanes with On-Street Parking and Two Roundabouts

Under Alternative 2, SR-28 would be modified from a four-lane cross section roadway to a three-lane cross section roadway. Alternative 2 also proposes single-lane roundabouts at Bear and Coon Streets, as a roundabout would operate better than a signalized intersection with a 3-lane cross section. When properly designed, a roundabout can move traffic efficiently through an intersection without a traffic signal (because the roundabout's circular traffic is always moving), reduce accidents compared with other types of intersection controls, and provide an opportunity for landscaping. To accommodate the roundabouts, travel lanes would be reduced to one 3.6-meter (12.0-foot) lane in each direction with a continuous 3.6-meter (12.0-foot) two-way left-turn lane. Parallel parking and designated bike lanes would be provided on both sides of the roadway, and 2.9-meter (9.5-foot) pedestrian sidewalks with landscaped amenities would be provided on each side. Enhanced and clearly marked pedestrian crossings at the SR 267, Deer, Bear, Coon, Fox, and Chipmunk intersections (with a signal at the SR 267 intersection) would be included as part of this alternative. The SR 28 signalized intersection with SR 267 would be maintained with four lanes and turn pockets. A transition from four lanes to two lanes would occur on SR 28 between SR 267 and Secline Street. A two-way left-turn lane would be provided and parallel parking prohibited within this section of SR 28. Sidewalks would be 1.7 meters (5.5 feet) wide on each side of SR 28. The standard two-lane section with two-way left-turn lane would begin east of Secline Street. Bike lanes, sidewalks, and parallel parking would be provided eastward to Chipmunk Street. Parallel parking would be prohibited at

driveways and bus turnouts and within intersection sight lines. A 2.4-meter (8.0-foot) parking lane would be created in each direction, and on-street parking would be prohibited during the peak summer season from Independence Day to Labor Day. Restrictions would be accomplished by signage, temporary barricades, and enforcement. The on-street parking loss would be compensated by the newly created off-site parking spaces proposed as part of the proposed action.

Alternative 2 would include the following elements:

- Pedestrian markings;
- Single 3.6-meter (12.0-foot) traffic lane in each direction;
- Single 3.6-meter (12.0-foot) dual-access center turn lane;
- 2.9-meter (9.5-foot) sidewalk and landscape area in each direction;
- 1.5-meter (5.0-foot) bike lane on each side;
- 2.4-meter (8.0-foot) parking lane in each direction, with on-street parking prohibited during the peak summer season from Independence Day to Labor Day;
- Off-street parking on side streets and in new parking lots (parking effects and parking compensation for each alternative are described in *Section 3.7*); and
- Roundabouts at intersections with Bear and Coon Streets.

Alternative 2 would also have the option of reducing the sidewalk width on both sides by 0.6 meter (2.0 feet). This 0.6 meter (2.0 feet) would be added to the parking and bike lane width throughout the action area. This option would be constructed to reduce the effect of on-street parking on through traffic.

The Alternative 2 Option would result in the following changes to Alternative 2:

- 2.3-meter (7.5-foot) sidewalk and landscape area in each direction;
- 2.7-meter (9.0-foot) parking lane in each direction; and

- 1.8-meter (6.0-foot) bike lane in each direction.

2.3.3 Alternative 3: Four Lanes with On-Street Parking

Alternative 3 includes improvements to pedestrian and bicycle access, bus stops, and parking. Under Alternative 3, SR 28 would remain a four-lane cross-section roadway with two 3.3-meter (11-foot) east/west traffic lanes until just east of the Fox Street intersection. Between the Fox Street and Chipmunk Street intersections, SR 28 would become a three-lane roadway, with one traffic lane in each direction and a two-way left-turn lane. Traffic signals would be installed at Bear Street and modified at SR 267 and Coon Street. Left-turn lanes, which are based upon traffic volumes, would be provided at SR 267, Bear Street, Fox Street, Coon Street, Chipmunk Street, and Secline Street. A 1.5-meter (5-foot) bike lane and 2.4-meter (8-foot) parking lane would be created in each direction. Along the roadway, a 1.7-meter (5.6-foot) sidewalk would be installed on both sides of SR 28. Enhanced and clearly marked pedestrian crossings at the SR 267, Deer, Bear, Coon, Fox, and Chipmunk intersections (with signals at the SR 267, Bear, and Coon intersections) would also be included as part of this alternative. The narrow ROW width of 24.4 meters (80.1 feet) would restrict the travel lanes to 3.3 meters (11 feet) and the sidewalks to 1.7 meters (5.6 feet) on each side.

Alternative 3 would include the following components:

- Two 3.3-meter (11-foot) traffic lanes in each direction;
- Traffic signals at SR 267, Bear Street, and Coon Street;
- Left-turn lanes at SR 267, Bear Street, Fox Street, Coon Street, Chipmunk Street, and Secline Street;
- A 1.5-meter (5-foot) bike lane in each direction;
- A 2.4-meter (8-foot) parking lane in each direction, as in Alternative 2;
- A 1.7-meter (5.6-foot) sidewalk in each direction;
- Off-street parking on side streets and in new parking lots; and

- Pedestrian crossings at SR 267, Secline Street, Deer Street, Bear Street, Coon Street, Fox Street, and Chipmunk Street. Only crossings at SR 267, Bear, and Coon would be controlled with signals.

2.3.4 Alternative 4: Three Lanes with Two Roundabouts and Without On-Street Parking

Alternative 4 is similar to Alternative 2 in that SR 28 would be modified from a four-lane cross-section roadway to a three-lane cross-section roadway. The significant difference is that parallel parking is not provided along the entire length of the action area. The loss of on-street parking on SR 28 would be offset through side-street parking and newly constructed parking lots to mitigate this loss. One 3.6-meter (12-foot) east/west traffic lane and a two-way left-turn lane of the same width would be provided. Along the roadway, a single 1.5-meter (5.0-foot) bike lane would be created in each direction; however, on-street parking would not be included in this alternative. The width saved from parking spaces is incorporated into the sidewalks and landscaped planting area, making them 5.3 meters (17.4 feet) wide on each side. Bus stop turnouts are provided under Alternative 4, and at these locations the sidewalk narrows to 2.9 meters (9.5 feet). Two roundabouts would be created at the SR 28 intersections with Bear and Coon Streets. Enhanced and clearly marked pedestrian crossings at the SR 267, Deer, Bear, Coon, Fox, and Chipmunk intersections (with signals at the SR 267 intersection) would also be included.

Alternative 4 would include the following components:

- Single 3.6-meter (12.0-foot) traffic lane in each direction;
- Single 3.6-meter (12.0-foot) dual-access center turn lane;
- No on-street parking on SR 28;
- Off-street parking on side streets and in new parking lots;
- A 1.5-meter (5.0-foot) bike lane in each direction;

- A 5.3-meter (17.4-foot) sidewalk landscape area in each direction;
- Roundabouts at the SR 28 intersections with Bear and Coon Streets; and
- Pedestrian crossings at SR 267, Secline Street, Deer Street, Bear Street, Coon Street, Fox Street, and Chipmunk Street. Only the crossing at SR 267 would be controlled with a signal.

Under all alternatives (except Alternative 1), Brook Avenue between Bear to Coon Streets would be converted to one-way eastbound, providing the opportunity for additional on-street parking. Alternative 3 is the only alternative that has a nonstandard design feature—3.3-meter (11.0-foot) lanes. Alternatives 2 and 4 do not have any nonstandard design features.

Under all build alternatives, ROW would be acquired in various locations adjacent to SR 28 and near affected intersections. The ROW would be acquired in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

2.4 Features Common to all Alternatives

2.4.1 Pedestrian and Bicycle Mobility

Features implemented as part of the proposed action that will serve to enhance and facilitate pedestrian and bicycle mobility through the action area include sidewalks and Class II bike lanes along both sides of SR 28 through the commercial core area, as well as signals, roundabouts, and enhanced and clearly marked pedestrian crossings. The sidewalks and bike lanes will allow pedestrians and bicyclists to easily navigate through the action area while signals, roundabouts, and enhanced and clearly marked pedestrian crossings will provide a substantially improved pedestrian crossing opportunity of SR 28.

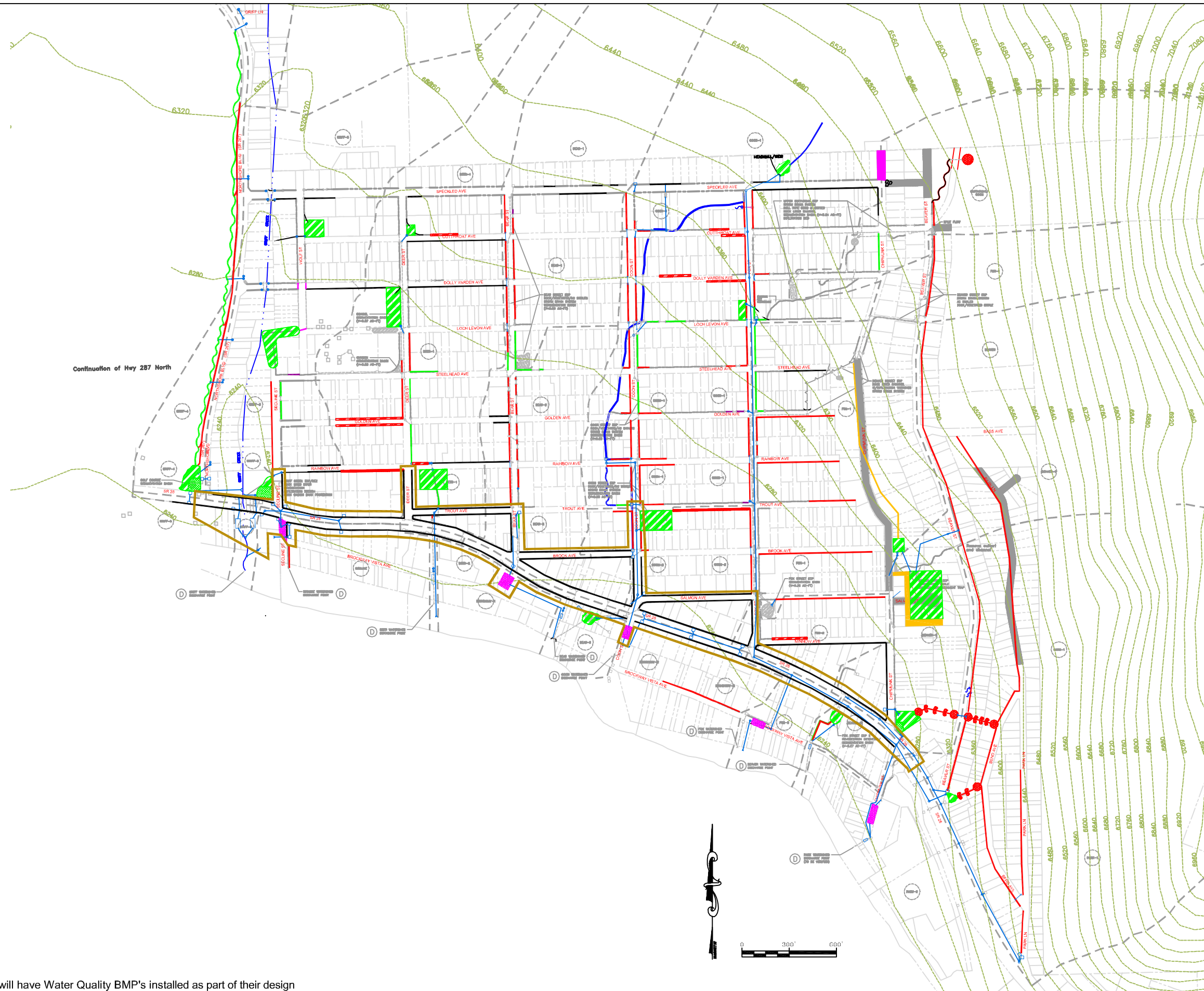
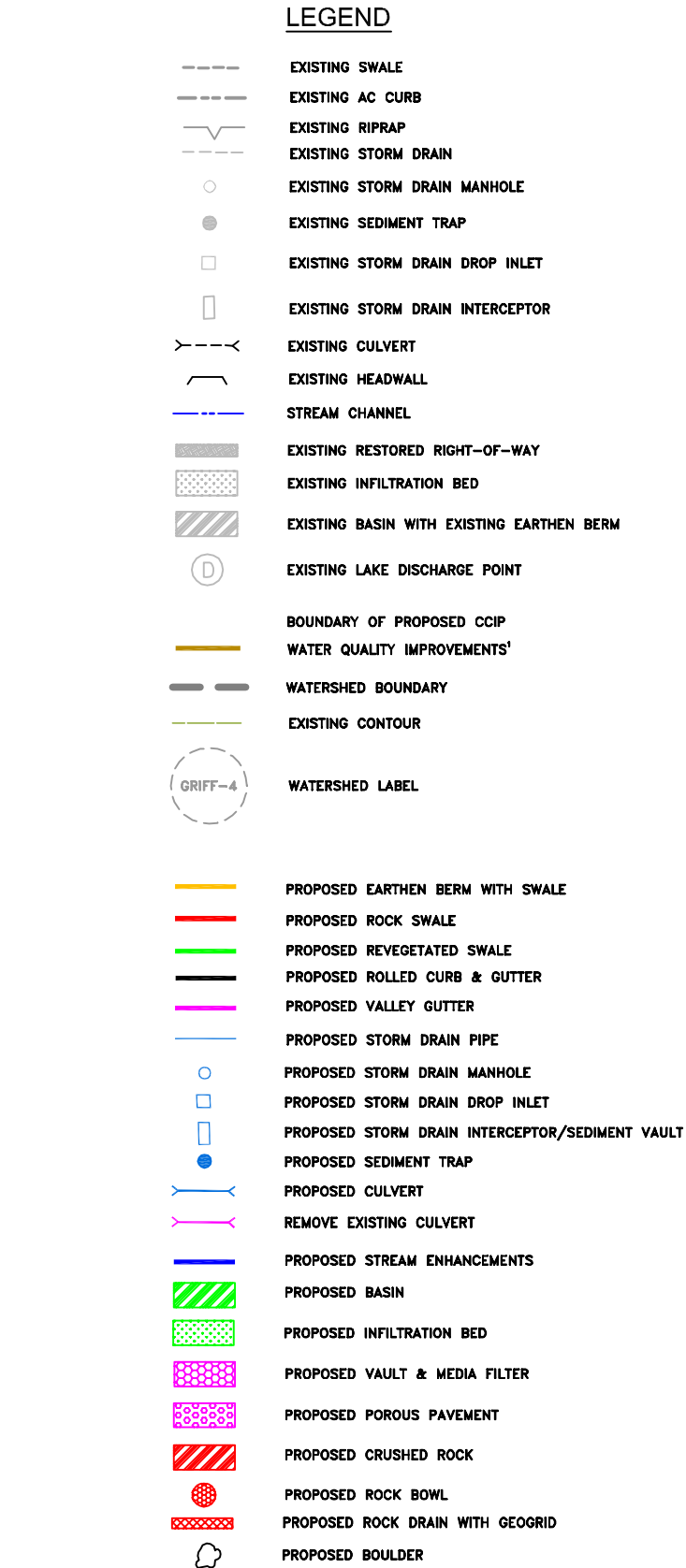
2.4.2 Water Quality Improvements

Water quality improvements associated with the proposed action include the construction of new collection and conveyance infrastructure (including, but are not limited to,

sedimentation basins, swales, sediment traps, box culverts, infiltration basins, new roadway curbs and gutters, storm drains, ditches, man-made channels, collection/detention basins, and other conveyance infrastructure) leading to the water treatment and conveyance facilities identified in the proposed Kings Beach Watershed Improvement Project (WIP). Appendix B contains the *Kings Beach Watershed Improvement Project Final Watershed Improvement Plan Memorandum* (Entrix 2006a), which details the planning process for the proposed WIP. Figure 2-2 indicates the water quality improvements associated with the proposed WIP, in addition to the improvements that will be implemented as part of the CCIP. The water quality improvements associated with the CCIP are located within the brown boundary on Figure 2-2. Water quality elements that will be installed include, but are not limited to, the following items:

- Constructing grass-lined swales where they can be supported to convey runoff along the ROW and promote infiltration;
- Constructing rock lined channels to convey water along the ROW and promote infiltration;
- Installing basins to collect and retain runoff;
- Constructing infiltration galleries to retain runoff; and
- Installing media filters, or advanced treatment technologies, to treat runoff from KBCC and Brockway Vista Avenue. (Entrix 2006a.)

On the streets upstream of SR 28, curbs and gutters will be installed as best management practices (BMP) to help collect and direct runoff from the potential on-street parking sites (Figure 2-3), as well as runoff flowing into the CCIP from areas upstream of the CCIP. These improvements would serve to mitigate increased runoff due to the creation of new hard coverage from the parking lots. Currently, there are no collection and conveyance features on these upstream streets to adequately direct the upstream runoff through the CCIP area; instead, the runoff flows directly through the CCIP and into Lake Tahoe. With the installation of the curbs and gutters as part of the CCIP, this runoff will be



Source: Entrix 2006a

¹Potential off-site parking lots will have Water Quality BMP's installed as part of their design

Figure 2-2
Kings Beach Commercial Core Improvement Project
Proposed Water Quality Improvement Components



Source: Dokken Engineering

Figure 2-3
Kings Beach Commercial Core Improvement Project
Potential Parking Sites

directed to collection basins, vaults, and media filters that will be upgraded and installed as part of the CCIP (Figure 2-2), and water would not flow untreated into Lake Tahoe, as under current conditions. In addition, improvements associated with the proposed WIP will further increase water treatment capacity.

At the potential off-site parking lots (Figure 2-3), no culverting or conveyance improvements would be constructed to direct runoff from these lots off site. Instead, runoff would be entirely contained onsite with the incorporation of BMPs (i.e., underground infiltration beds) into the parking lot design. The off-site parking lots would be designed to maintain runoff from a 20-year, 1-hour storm flow entirely on-site, while erosion control measures to protect water quality would also be incorporated into the design. The water collection and infiltration features incorporated into the off-site parking lots are designed to mitigate runoff associated with the additional hard coverage from the parking lots. And, because water would be contained entirely onsite, the off-site lots would not worsen water quality in the region.

Along SR 28, curbs and gutters will be installed to help direct runoff through the CCIP, while storm drain inlets and interceptors will be constructed to direct collected runoff to the collection basins, vaults, and media filters that will be upgraded and installed as part of the CCIP. The proposed vaults and media filters located outside the brown boundary on Figure 2-2 are not associated with the CCIP. Instead, they are considered water quality improvements that will be implemented as part of the proposed WIP, which will further increase water treatment capacity. Vaults and media filters installed beneath Placer County roads (Coon Street and Secline Street/Brockway Vista Avenue) will be located entirely within the roadway ROW. Construction activities, including equipment staging and parking must occur entirely within the ROW, and no temporary construction easements will be obtained to allow construction activities/staging outside of the ROW. In addition, the vault and media filter proposed at Secline Street may be moved to Brockway Vista Avenue if conditions prohibit the placement of the facility at Secline Street.

The capacity of upstream facilities affected by the proposed action that tie into and interface with the proposed WIP improvements would be enlarged to allow for the collection and conveyance of both upstream flows and stormwater flows generated by the roadway itself. Facilities would be designed and constructed so that they can accommodate stormwater generated in the area as well as stormwater conveyed into the area from upstream. Drainage, collection, conveyance, and treatment improvements are among those included in the proposed WIP to improve water quality in the Kings Beach region as well as in the CCIP area.

2.4.3 Scenic and Aesthetic Improvements

Scenic and aesthetic improvements that would enhance the scenic integrity of the KBCC include entry statements at the east and west ends of the KBCC; the installation of streetlights, benches, transit facilities, planters, bicycle racks, and trash receptacles; organized parking; and additional landscaping.

2.4.4 Property Acquisitions

The three build alternatives would involve minor partial acquisitions of properties adjacent to the SR-28 ROW as well as parcels for the parking lots. Property owners would receive just compensation for any acquisitions. No building acquisitions (including demolitions or relocations) or damage to property would result from implementation of the build alternatives, although construction of the off-street parking lots may result in building acquisitions, depending on which of the potential off-site parking lots (Figure 2-3) are eventually chosen. However, no acquisitions of culturally significant buildings would occur.

2.4.5 Parking

To fully compensate for the loss of parking associated with each build alternative, Placer County has committed to providing new off-site parking spaces. New parking spaces would be provided in a manner that addresses the parking requirements of each block affected in order to ensure that adequate parking conditions are maintained. Figure 2-3 shows the potential locations of new off-site parking lots and spaces, while Table 2-2

Table 2-2. Summary of Potential Parking Components

Element	APN	Existing land use & Ownership	Number of parking spaces	TRPA Land Classification	Area (acres) ¹	Hard coverage (acres) ²	LSOGs Severely Damaged	LSOGs Removed	Trees Severely Damaged ^b	Trees Removed	LSOG Quantity	Tree Quantity
Potential parking locations												
1	NA	Vacant/Private	14	5	0.09	0.04	3	0	2	2	3	7
3	090-122-030 090-122-031	Vacant/Public (Stoker Prop.)	41	1b/5	0.50	0.25	9	0	1	3	10	16
4	090-126-017	Vacant/Private	5	1b	0.14	0.07	3	0	2	2	3	7
6	090-133-008 090-133-009	Residential Motel/Private	37	5	0.42	0.21	5	0	1	3	8	7
7	090-221-013 090-221-014 090-221-020	Abandon Fuel Station/Private	40	1b/5	0.47	0.23	1	0	0	0	1	2
8	090-192-030	Vacant/Private	28	5	0.39	0.20	5	0	4	6	7	20
9	090-133-006 090-133-007	Vacant/Private	27	5	0.31	0.15	5	0	2	7	8	7
10 ³	NA	County ROW	38	1b/5	0.20	0.10	0	0	0	0	0	0
14	090-134-042	Vacant/Private	24	5	0.27	0.13	3	0	1	8	3	12
15	090-134-007	Parking/Private	11	5	0.25	0.13	1	0	4	3	2	13
17	090-134-008	Business/Private	24	5	0.25	0.13	2	0	1	2	2	11
18	090-134-006	Business/Private	11	5	0.11	0.05	0	0	0	0	0	3
19	NA	County ROW	9	5	0.05	0.03	0	0	0	3	0	3
20 ³	NA	County ROW	5	5	0.03	0.01	0	0	0	0	0	0
21	NA	County ROW	11	5	0.06	0.03	1	0	4	1	2	6
22	NA	County ROW	14	5	0.07	0.04	3	0	1	0	3	4
23	090-122-001	Vacant/Private	12	1b	0.12	0.06	2	0	0	1	2	3

Table 2-2. Continued

Element	APN	Existing land use & Ownership	Number of parking spaces	TRPA Land Classification	Area (acres) ¹	Hard coverage (acres) ²	LSOGs Severely Damaged	LSOGs Removed	Trees Severely Damaged ^b	Trees Removed	LSOG Quantity	Tree Quantity
24	NA	County ROW	6	5	0.03	0.02	0	0	1	0	0	1
25	090-122-023 090-122-036 090-122-035	Vacant/private	24	5	0.36	0.18	10	0	2	7	10	23
26	NA	County ROW	14	1b/5	0.07	0.04	1	0	2	1	1	4
27	NA	County ROW	21	1b	0.12	0.06	0	0	3	5	0	8
28 ³	NA	County ROW	4	1b	0.02	0.01	0	0	0	0	0	0
29	NA	County ROW	9	5	0.04	0.02	1	0	4	1	1	6
30	NA	County ROW	13	5	0.08	0.04	3	0	1	0	3	4
31	NA	County ROW	10	1b/5	0.04	0.02	1	0	0	0	1	1
32	090-192-025	Vacant/private	30	5	0.05	0.03	0	0	2	4	0	30
33	NA	County ROW	16	1b/5	0.08	0.04	1	0	2	0	1	6
34	NA	County ROW	6	5	0.03	0.02	1	0	1	4	1	6
Totals:	NA	NA	504	NA	4.65	2.33	61	0	41	63	72	210
Parking locations considered and withdrawn⁴												
A	090-071-017 090-071-033	Vacant/private	42	5	0.55	0.28	NA	NA	NA	NA	NA	NA
B	090-074-023 090-074-024	Residential/private	80	5	0.94	0.47	NA	NA	NA	NA	NA	NA
C	090-071-009	Residential/private	24	5	0.29	0.14	NA	NA	NA	NA	NA	NA
Totals:	NA	NA	146	NA	1.77	0.89	NA	NA	NA	NA	NA	NA

Table 2-2. Continued

Element	APN	Existing land use & Ownership	Number of parking spaces	TRPA Land Classification	Area (acres) ¹	Hard coverage (acres) ²	LSOGs Severely Damaged	LSOGs Removed	Trees Severely Damaged ^b	Trees Removed	LSOG Quantity	Tree Quantity
\Parking locations built before completion of the CCIP												
D	090-122-019	Existing parking lot/vacant/Placer County	20	5	0.29	0.14	NA	NA	NA	NA	NA	NA
E	090-126-020	Vacant/Placer County	22	5	0.21	0.11	NA	NA	NA	NA	NA	NA
F	090-192-025	Vacant/Placer County	21	5	0.21	0.10	NA	NA	NA	NA	NA	NA
Totals:	NA	NA	63	NA	0.71	0.35	NA	NA	NA	NA	NA	NA

Notes:

¹ Projected area: actual area will be determined once project final design is completed.² Assumes 50% coverage of total lot acreage; total area of hard coverage will be determined once project final design is completed.³ No trees would be removed from these potential parking locations.⁴ Parking lots have been withdrawn due to existing land use conflicts or other environmental constraints.

summarizes components associated with these locations. To date, three parking lots (63 spaces) have been identified as compensation for the parking spaces that would be removed by the build alternatives, and construction of these lots will occur before implementation of the proposed action. Several additional parking sites have also been identified as potential candidates for new parking lots and are evaluated in this document (see discussion in *Section 3.7*). No property acquisitions (including demolitions or relocations) would be associated with the provision of new parking spaces.

2.5 Alternatives Considered and Withdrawn

Caltrans and Placer County undertook a comprehensive screening process to evaluate potential alternatives for consideration during the environmental review process. Potential alternatives were selected on their ability to meet the action objectives. In addition, factors such as cost, environmental effects, operational efficiency, construction phasing, and maintainability of the built system were considered. Based on this screening process Caltrans and Placer County identified the build alternatives (described in *Section 2.3*) for environmental review. At the end of the process a preferred alternative will be selected and other alternatives withdrawn.

In addition to the build alternatives discussed in *Section 2.3*, the following alternatives were evaluated but withdrawn from further consideration.

2.5.1 Roundabout Alternative

This would involve a third roundabout located at the intersection of SR-28 and SR-267 under Alternatives 2, 4, and 5. The roadway from the west edge of the Safeway parking lot to just east of the SR-28/Secline Street intersection would be shifted north to accommodate the roundabout. However, extensive roadway and driveway modifications and ROW acquisitions would not meet the action purpose and need to limit such intrusions. Additional geometric difficulties made this alternative infeasible. This rejected alternative is illustrated in Figure 2-4.

2.5.2 Alternative 5: Two Westbound Lanes, One Eastbound Lane, Two-Way Left-Turn Lane, Westbound On-street Parking and Two Roundabouts

This alternative consists of two westbound travel lanes with adjacent on-street parking, a center turn lane, a single eastbound through lane without adjacent on-street parking (year-round), and roundabouts at the SR 28 intersections with Bear and Coon Streets. Brook Avenue would be converted to one-way eastbound from Bear Street to Coon Street.

This alternative as a stand-alone alternative was initially considered but subsequently dropped from further consideration because the Bear Street hybrid roundabout would result in the loss of 14 parking stalls in the State Park parking lot and a complete circulation reconfiguration, while the Coon Street hybrid roundabout would result in the unacceptable level of acquisitions of land from the southeast and southwest corner parcels. These potential intrusions met the action's purpose, but were considered infeasible due to Section 4(f) conflicts and the expected cost of property acquisitions. This rejected alternative is illustrated in Figure 2-5.

2.5.3 Alternative 3a with Signals at Deer, Fox, and Secline Streets

Alternative 3a is the same as Alternative 3, with the addition of signals at Deer and Fox Streets. This alternative as a stand-alone alternative was initially considered but subsequently dropped from further consideration because the warrants indicating the need for signalization at these intersections, which were based on safety/accident data (rather than from a traffic operations warrant), did not meet the warrant for signalization on a year-round basis. Accordingly, there is no current need for these signals. Although the appropriate safety/accident warrants requiring the year-round signalization of these intersections may be met in future years, it is anticipated that such determinations will be considered as a separate roadway improvement project.

2.5.4 Alternative 2b with Roundabouts at Deer Street and Fox Street

Alternative 2b is the same as Alternative 2, with the addition of roundabouts at Deer and Fox Streets. This alternative as a stand-alone alternative was initially considered but

subsequently dropped from further consideration because it would involve substantial intrusions onto private property (i.e., building and parking acquisitions). These potential intrusions did not meet the action purpose and need to limit such intrusions to the extent practicable and would add costs to the project.

2.5.5 Alternative 4b with Roundabouts at Deer Street and Fox Street

Alternative 4b is the same as Alternative 4, with the addition of roundabouts at Deer and Fox Streets. This alternative as a stand-alone alternative was initially considered but subsequently dropped from further consideration because it would involve substantial intrusions onto private property (i.e., building and parking acquisitions). These potential intrusions did not meet the action purpose and need to limit such intrusions to the extent practicable and would add costs to the project.